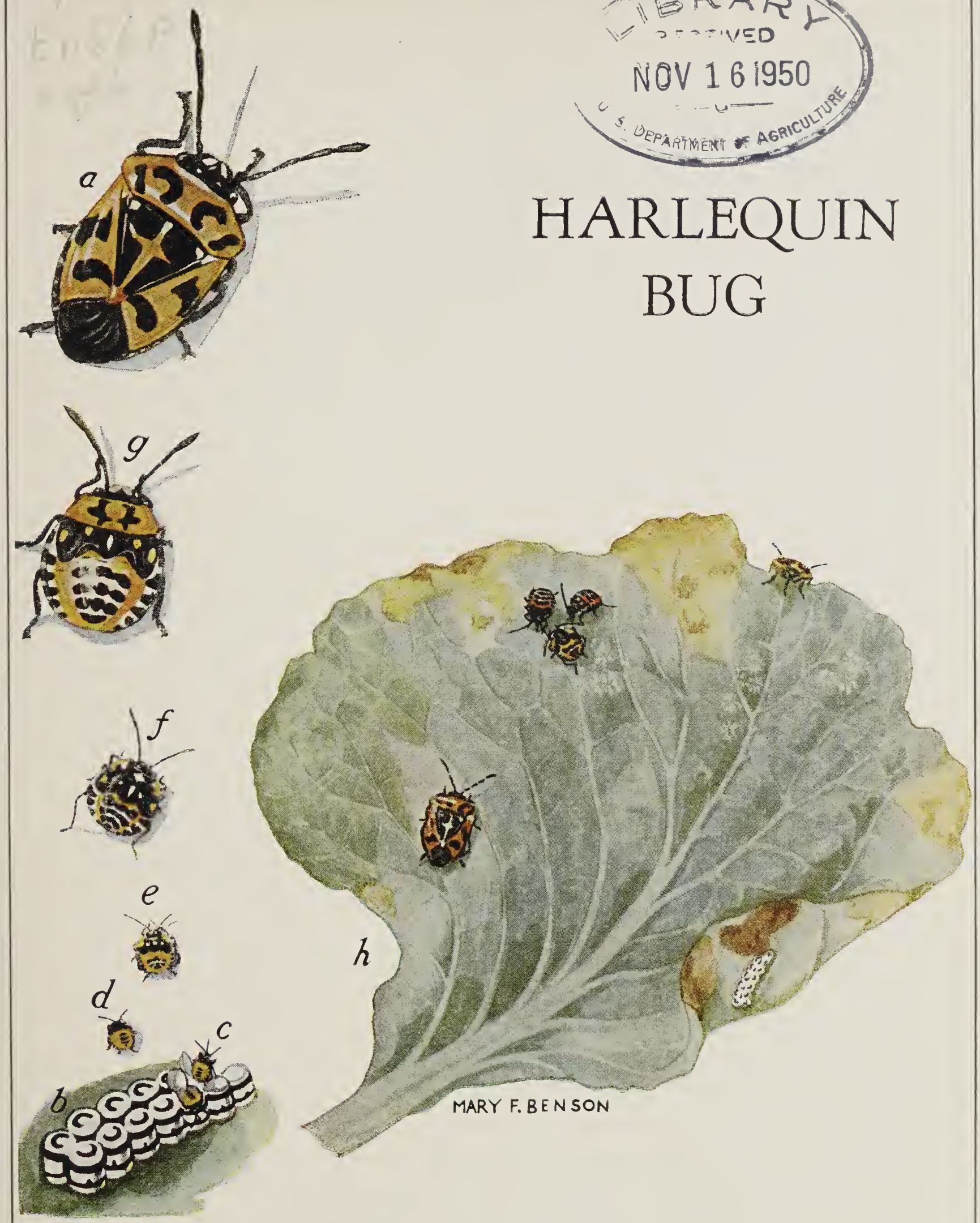
Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

SHOUT
SHARE
IT

LIBRARY
RECEIVED
NOV 16 1950
U. S. DEPARTMENT OF AGRICULTURE

HARLEQUIN BUG



a, Adult; *b*, eggs; *c to* g, young, or nymphs; *h*, damaged cabbage leaf with nymphs, adult bug, and eggs. (*a* and *c* to g about 3 times natural size; *b* about 4 times natural size, *h* about natural size.)

(See other side for life history and control)

Bureau of Entomology and Plant Quarantine
United States Department of Agriculture

Picture Sheet No. 5

16—13382 1

HARLEQUIN BUG

(*Murgantia histrionica* Hahn)

Life History

The harlequin bug is a southern plant pest and lives through the winter in the adult stage near fields where its food plants are grown. The bugs leave their winter quarters early in the spring and seek their favorite food plants, which are cabbage, collard, turnip, horseradish, kale, and related crops. The increase in population is started by the eggs, which are laid on the under side of the leaves. These eggs hatch in from 4 to 15 days, and the young, or nymphs, feed and develop on the leaves of the plants, sucking the sap from the leaves and stems. Shortly afterward white areas or blotches appear about the spots where the feeding has occurred, and the injury often causes the plants to wither and die. The insect becomes full-grown in from 40 to 50 days after hatching from the egg. The adult, or winged stage, is reached after the nymphs have passed through five immature stages, or instars. Within 2 or 3 weeks after becoming full-grown the female is ready to deposit eggs for another brood.

Control

Practice clean cultural methods throughout the season. Disk and plow under all stalks and other refuse as soon as the crop has been harvested. The growing of trap crops, hand picking, and the use of the blow torch are also effective methods of keeping down the number of bugs.

Control by insecticides is recommended only after preventive measures to reduce the numbers of the insect have been followed.

Spray or dust with derris or cube.

Use 1½ pounds of derris or cube root powder (containing 4 percent of rotenone) with a spreader and wetting agent in 50 gallons of water; or, in smaller quantities, 1½ ounces (10 level tablespoonfuls) with a spreader and wetting agent in 3 gallons of water.

For dusting, use a derris or cube dust containing 0.75 percent of rotenone. To prepare this dust, use 15 ounces of finely ground root (having a 4-percent rotenone content) to 4 pounds and 1 ounce of the diluent (finely ground talc, clay, sulfur, tobacco, or other powder except lime), or 18¾ pounds of the root to 81¼ pounds of the diluent. If the rotenone content of the derris or cube is greater or less than 4 percent, then the proportions of the inert diluent must be varied accordingly.

Begin spraying or dusting when the bugs first appear and repeat the treatments as often as necessary.

16—13382-1

March 1940 U. S. Government Printing Office

For sale by the Superintendent of Documents, Washington, D. C.—Price 5 cents